

Remarks

This Application has been carefully reviewed in light of the Office Action mailed August 28, 2006 (the "Office Action"). Applicants appreciate the Examiner's consideration of the Application. Claims 1-15 were rejected in the Office Action. Claims 13-15 are amended to correct typographical errors. Claims 1-15 remain pending. Applicants respectfully request reconsideration and allowance of all pending claims.

Rejections under 35 U.S.C. § 101

The Examiner rejects claims 1-15 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. (Office Action, Page 2) Applicants respectfully disagree.

First, the patent laws define patentable subject matter as "any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereto." *See* 35 U.S.C. § 101. When an abstract idea is reduced to a practical application, the abstract idea no longer stands alone if the practical application of the abstract idea produces a useful, concrete, and tangible result. This then satisfies the requirements of 35 U.S.C. § 101. *See In re Alappat*, 33 F.3d 1526, 1544, 31 U.S.P.Q.2d 1545, 1557 (Fed. Cir. 1994); *see also State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373, 47 U.S.P.Q.2d 1596, 1601-02 (Fed. Cir. 1998). While an abstract idea by itself may not satisfy the requirements of 35 U.S.C. § 101, an abstract idea when practically applied to produce a useful, concrete, and tangible result satisfies 35 U.S.C. § 101. *See AT&T Corp. v. Excel Comm. Inc.*, 172 F.3d 1352, 1357, 50 U.S.P.Q. 1447, 1452 (Fed. Cir. 1999) (stating that as technology progressed, the CCPA overturned some of the earlier limiting principles regarding 35 U.S.C. § 101 and announced more expansive principles formulated with computer technology in mind); *see also In re Musgrave*, 431 F.2d 882, 167 U.S.P.Q. 280 (CCPA 1970) (cited by the Federal Circuit in *AT&T Corp.*, 172 F.3d at 1356). Thus, producing a useful, concrete, and tangible result is the key to patentability according to *State Street* and other applicable case law.

"Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101." M.P.E.P. § 2106. Indeed, a

method or process remains statutory even if some or all of the steps therein can be performed in the human mind, with the aid of the human mind, or because it may be necessary for one performing the method or process to think. *See In re Musgrave*, 431 F.2d at 893, 167 U.S.P.Q. at 289. As stated by the Federal Circuit in *State Street* and as explicitly confirmed in the M.P.E.P., “[T]ransformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces ‘a useful, concrete, and tangible result’ -- a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades.” *State Street*, 149 F.3d at 1373, 47 U.S.P.Q.2d at 1601-02; M.P.E.P. § 2106. As discussed below, Applicants’ Claims 1-15 clearly recite a useful, concrete, and tangible result and are therefore directed to patentable subject matter.

As an example, Claim 1 is directed to an adaptive system modeling method in which a set of input features and a superset of the input features and other features are selected from a plurality of candidate features of a system. A system model is generated by using data corresponding to the selected input feature set. Moreover, online data corresponding to the superset of the input features and other features collected from the system are maintained.

Applicant respectfully contends that, at a minimum, the limitations “generating a system model” and “maintaining online data” are useful, concrete and tangible results of Claim 1. For at least these reasons, Applicant respectfully requests the withdrawal of the rejection of Claim 1 under 35 U. S. C. § 101.

Similar to Claim 1, each of Claims 3 and 6 include limitations generally directed to “generating a system model.” As discussed above with regard to Claim 1, Applicant respectfully contends that this represents a useful, concrete and tangible result. For at least these reasons, Applicant respectfully requests the withdrawal of the rejections of Claims 3 and 6 under 35 U. S. C. 101.

Claims 2, 4 and 5 depend from Claims 1 or 3. Therefore, Applicant respectfully requests the withdrawal of the rejections of Claims 2, 4 and 5 under 35 U. S. C. § 101 for at least those reasons discussed above with regard to their respective base claims.

Claims 7, 8 and 9 are directed to a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method of Claims 1, 3 or 6. Therefore, Applicant respectfully requests the withdrawal of the rejections of Claims 7, 8, and 9 under 35 U. S. C. § 101 , for at least those reasons discussed above with regard to Claims 3 and 6.

Claims 10, 11 and 12 are directed to a computer system that include *inter alia*, a program storage device tangibly embodying a program of instructions executable by a computer to perform the method of Claims 1, 3 or 6. Therefore, Applicants respectfully request the withdrawal of the rejections of Claims 10, 11 and 12 under 35 U. S. C. § 101 for at least those reasons discussed above with regard to Claims 3 and 6.

Claims 13, 14 and 15 are directed to a data signal embodied in a transmission medium which embodies instructions to perform the method of Claims 1, 3 or 6. Therefore, Applicant respectfully requests the withdrawal of the rejections of Claims 13, 14 and 15 under 35 U. S. C. § 101 for at least those reasons discussed above with regard to Claims 3 and 6.

The Office Action discusses and attempts to characterize several phrases used in the specification and/or claims of the instant application. See Office Action, Pages 2-3. The Office Action also contends that “since the terminology is either undefined or its use is not explained, the abstract elements lack logical structure. That is even as a manipulation of abstract ideas, the logical flow is not explained.” *Id.*

Applicant does not agree with or acquiesce to all of the characterizations, statements and/or definitions delineated in the Office Action. Moreover, Applicant respectfully disagrees with the conclusions of the Office Action regarding the use of these terms, in particular with the use of these definitions, characterizations and conclusions of the Office Action in support of rejections under 35 U. S. C. § 101.

Applicant respectfully contends that the term “baseline significance signature” is defined and/or explained with sufficient specificity to allow a person of ordinary skill in the art to appreciate the meaning and scope of the claims. As one example, in accordance with a particular embodiment of the present invention, the specification describes the utilization of “discriminant analysis to characterize the relative significance of the P input features used for modeling.” This ranking of features by significance is referred to herein as a ‘significance signature’. For at least these reasons, Applicant respectfully requests the withdrawal of the rejections of claims 1-15 under 35 U. S. C. § 101.

No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the references cited by the Examiner. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the Examiner's rejections.

Conclusion

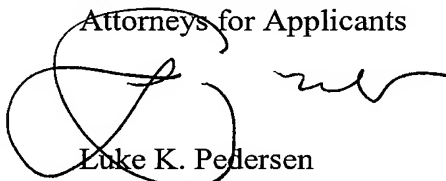
Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact the undersigned Attorney for Applicants, at the Examiner's convenience at (214) 953-6655.

Applicants have included herewith authorization for the fees associated with a one-month extension of time for response. No additional fee is believed to be due. However, the Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-0384 of BAKER BOTTS L.L.P.

Respectfully submitted,

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Date: 12/28/06

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